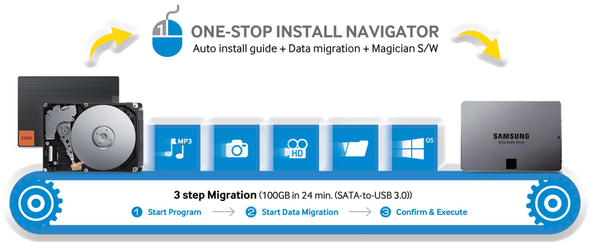

One-stop Install Navigator

Simple and easy tools for a convenient upgrade

Now, with the performance and reliability proven, you would be wondering: how do I use this great solution? Installing and managing an SSD may look daunting, but with 840 EVO, your upgrade becomes simple and quick. Using a SATA-to-USB 3.0 connector included in the laptop upgrade package, for a data size of 100GB, you can migrate all the data from your HDD to 840 EVO in only 24 minutes—just a third of the time needed for a SATA-to-USB 2.0 connector offered in some previous models.

Using the One-stop Install Navigator software toolkit, your SSD installation will be a snap. The Auto Install guide will guide you smoothly through the whole installation process. The Samsung Data Migration software features straightforward three-step process with options to help migrate your data in the optimal way.

Conveniently monitor and manage your SSD with the Samsung Magician software also included in the toolkit. Samsung Magician will help you maximize performance with benchmarking, advanced OS optimization, disk health status tracking and over-provisioning settings. 840 EVO makes your upgrade a simple job, and your PC's awesome performance will leave you feeling glad that you did.

Product Lineup

Density	Model Name	Box Contents	Model Code
120 GB	MZ-7TE120	Basic (SSD Only)	MZ-7TE120BW
		Desktop Upgrade kit	MZ-7TE120KW
250 GB	MZ-7TE250	Basic (SSD Only)	MZ-7TE250BW
		Desktop Upgrade kit	MZ-7TE250KW
		Laptop Upgrade Kit	MZ-7TE250LW
500 GB	MZ-7TE500	Basic (SSD Only)	MZ-7TE500BW
		Laptop Upgrade Kit	MZ-7TE500LW
750 GB	MZ-7TE750	Basic (SSD Only)	MZ-7TE750BW
1 TB	MZ-7TE1T0	Basic (SSD Only)	MZ-7TE1T0BW

Contents

Contents	Basic	Laptop upgrade	Desktop Upgrade
3.5" bracket with screws	x	x	Yes
SATA data cable	x	x	Yes
Mounting spacer	x	Yes	x
SATA to USB connector	x	Yes	Yes
SSD Installation Guide (Printed)	Yes	Yes	Yes
SSD Warranty Summary (Printed)	Yes	Yes	Yes
Samsung sofrware & manual CD	Yes	Yes	Yes
SSD Activation Sticker	Yes	Yes	Yes

Package-Set

Basic (SSD Only)

Desktop Upgrade kit

Laptop Upgrade kit

Technical Specifications

Samsung SSD 840 EVO		
Usage Application	Client PCs*	
Capacity	120GB, 250GB, 500GB, 750GB and 1TB	
Dimensions(L x W x H)	100 x 69.85 x 6.8 (mm)	
Interface	SATA 6Gb/s (compatible with SATA 3Gb/s and 1.5Gb/s)	
Form Factor	2.5-inch	
Controller	Samsung 3-core MEX Controller	
NAND Flash Memory	1x nm Samsung Toggle DDR 2.0 NAND Flash Memory (400Mbps)	
DRAM Cache Memory	256MB (120GB) or 512MB(250GB&500GB) or 1GB(750GB&1TB) LPDDR2	
Performance**	Sequential Read :	Max. 540MB/s
	Sequential Write*** :	Max. 520 MB/s(250GB/ 500GB/ 750GB/ 1TB)
		Max. 410 MB/s(120GB)
	4KB Random Read (QD1) :	Max. 10,000 IOPS
	4KB Random Read (QD1) :	Max. 33,000 IOPS
	4KB Random Read (QD32) :	Max. 98,000 IOPS (500GB/750GB/1TB)
		Max. 97,000 IOPS (250GB)
		Max. 94,000 IOPS (120GB)
	4KB Random Read (QD32) :	Max. 90,000 IOPS (500GB/750GB/1TB)
		Max. 66,000 IOPS (120GB)
		Max. 35,000 IOPS (120GB)
TRIM Support	Yes (Requires OS Support)	
Garbage Collection	Yes	
S.M.A.R.T	Yes	
Security	AES 256-bit Full Disk Encryption (FDE)	
Weight	Max. 53g (1TB)	
Reliability	MTBF : 1.5 million hours	
Power Consumption	Average : 0.1W****(Typical) Idle : 0.045W (Typical, DIPM ON)	
Temperature	Operating : 0C to 70C Non-Operating : -55C to 95C	
Humidity	5% TO 95%, non-condensing	
Vibration	Non-Operating : 20 ~ 2000Hz, 20G	
Shock	Non-Operating : 1500G, duration 0.5m sec, 3 axis	
Warranty	3 years limited	

System Configuration : Intel Core i7-3770 @ 3.4GHz, 4GB DDR3 SDRAM (2GBx2) 1333Mbps; Asus motherboard with Intel 7 Series Z77 Chipset; Windows 7 Ultimate x64 SP1; IRST 11.2, MS performance guide pre-condition

* 840 EVO is not validated for data center usage.
** Sequential performance measurements based on CrystalDiskMark v.3.0.1. Random performance measurements based on Iometer 2010. Performance may vary based on SSD's firmware version, system hardware & configuration
*** Sequential Write performance measurements reflect TurboWrite operation.
**** Power consumption measured with MobileMark 2007 in Windows 7. Values calculated using laptop computer and represent system-level power consumption.

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www.samsung.com

Solid State Drive

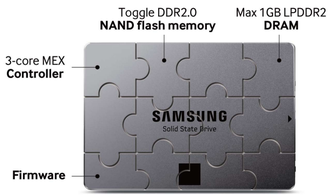
Your computing life upgraded with 840 EVO

Upgrade easily and enjoy a brand new computing life with the fast performance and proven reliability of Samsung SSD 840 EVO. **www.samsung.com/ssd**

It's time for your PC to evolve

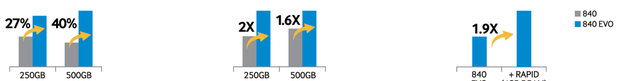
The evolution of solid state drive (SSD) has arrived with the Samsung SSD 840 EVO. Combining the best SSD technologies from Samsung, 840 EVO delivers superior performance to change your everyday PC usage. Its top notch performance comes with high reliability you can count on, simple solutions to help your SSD use, and a design that will complete your style. Being a Samsung SSD combining the finest hardware components and easy-to-use solutions, 840 EVO will give you the all-in-one solution with the top-notch performance you want. So, it's time you said goodbye to your old HDD and welcome your PC's brand new enhancement with 840 EVO.

Integrated solution combining top-quality components



With the shift of hard disk drives moving from HDDs to SSDs as technology advances, it really becomes a question of which SSD to choose. Samsung SSD EVO 840 has been built for excellence. Samsung innovation and technology has been forged to create the EVO 840 with superior performance and reliability along with a slew of other powerful and unique features to make it the best option for your PC upgrade needs.

Just as delectable dishes are made from the best ingredients, Samsung combines the finest components to create superior-quality SSDs. Samsung uses the best quality NAND flash memory chips from its own fabrication lines for SSDs. Only the chips with the highest quality, top performance and greatest longevity potential are selected for SSDs, the most demanding of memory applications. With all the components, including controllers and DRAM, produced by Samsung, the quality of your SSD is assured. Advanced new firmware that optimizes how the components go together enables Samsung to serve up the right combination for your PC's best performance and reliability. Let the 840 EVO, the new addition to our lineup of superior SSDs, evolve your PC.



Random Read Speed at 4KB, QD1

Sequential Write Speed

PCMark Vantage Score (500GB)

Experience a brand new, faster performance

Significantly reduce waiting times and enjoy time for yourself with 840 EVO. 840 EVO is significantly faster than a standard HDD, providing more rapid sequential and random read and write times for every task. Samsung's new 3-bit MLC NAND flash memory stores data more efficiently, increasing both speed and reliability. Whether it's a heavy workload like video file editing or a simple task like a virus scan, 840 EVO runs every job smoothly and quickly. Multitasking is a simple job for this SSD, which can operate several tasks simultaneously nearly three times faster than an HDD. Working more efficiently with the high-performing Samsung SSD 840 EVO will change your everyday computer usage.

TurboWrite : Always be in high acceleration

If you are a speed demon, you will certainly enjoy the new level of excitement 840 EVO offers you. Thanks to Samsung's TurboWrite technology, 840 EVO can deliver much faster sequential write speeds compared to the previous 840 model, tripling the speed from 130 to 410MB/s in 120GB drives, and doubling it from 250 to 520MB/s in 250GB drives. The drive's random read rate for light workloads (QD1) is 10,000 Input/Output Operations Per Second (IOPS), the best in the industry. Utilizing an innovative write acceleration algorithm and high performance write buffer, you can expect accelerated speeds and higher satisfaction from your PC.

RAPID mode : Enjoy rapid performance by switching to a higher gear

Like changing gears in a car, with Magician software you have the option of RAPID mode, enhancing performance by processing data on a system level through the use of free PC memory (DRAM) as a cache. Depending on your PC memory, you can expect higher performance and more efficient command processing, which improves with repeated tasking. Boost into a higher gear to vastly improve QD1 random write performance to almost the same level as QD32.

Transforming the computing experience for all users

For users at home : The boost to your day-to-day tasks

Your daily workload usually includes a little bit of everything—listening to music, watching videos, and doing homework or office work. 840 EVO makes sure you can keep on doing these tasks smoothly with a lightning fast read rate for light workloads (QD1) at 10,000 IOPS, the best in the industry. Load programs and applications twice as fast as standard HDDs to take care of all your daily tasks with less wait time, so you can accomplish the day's errands in less time to have more time for yourself.

For Users at office : Finish your work faster

Boost your performance at work with an SSD that allows you to work on multiple operations at a rate that's more than 3x faster than an HDD. Work on your presentation and business reports while checking e-mail, downloading and copying files and documents. For faster performance, take your PC into a higher gear with RAPID mode with Samsung Magic software. In RAPID mode you can use free PC memory (DRAM) as a cache, vastly improving QD1 random write performance to almost the same level as QD32. Working more efficiently with 840 EVO will help you finish your work faster so that you can go home earlier.

For gamers : Let your game's story continue on

When you're in the middle of destroying the big boss or about to finish a mission the last thing you need is your computer to lag or become choppy. 840 EVO smoothly loads your game data so that your exciting gaming experience continues on. With superior read and write speeds, 840 EVO will take your gaming to a new level with improved graphics as well as seamless game play. Stay immersed in your favorite game whether it's a first person shooter or a massive-multiplayer online game and enjoy without interruption.

For photographers and graphic designers : The performance to support your creativity

Unleash your creativity on the digital canvas with 840 EVO, which will enable your PC to keep up with your intricate strokes and sophisticated editing. With a speed 5x faster than an HDD in searching and copying files, access and use large photo files with ease. Using TurboWrite technology, you can triple sequential write speeds so that you can retouch and save your works faster. 840 EVO will help you keep your art work safe even when you work outdoors, with more resistance to shocks and vibration, and thermal guard to keep your PC from heating up.

Unmatched reliability for consistently high performance

High performance is great, but you want to keep it up at all times, not just for brief moments. Here's a solution: 840 EVO helps toughen up your PC so that it can cope with almost any daily life situation. Shocks, vibrations, high temperatures—bring it on! With its robust strength, 840 EVO boasts an incredibly long life expectancy and a very low failure rate. What's more, Samsung offers a 3-year warranty to back it up.

The reliability of 840 EVO does not apply only to its physique. Equipped with Advanced Signal Processing, 840 EVO automatically corrects errors so you'll worry less about your data's stability. Plus, using Samsung Self-Monitoring Analysis & Reporting Technology (SMART), you can track your SSD's health status. SMART warns you of any unforeseen errors before they occur, so you'll be prepared.

Keep your PC performance safe from heat

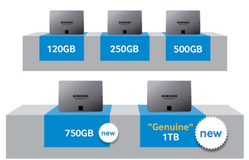
One thing to watch for when you're using your PC for a long time is the heat making your PC sluggish. With 840 EVO, your PC stays cool, even when you sometimes overwork it. Samsung's Dynamic Thermal Guard Algorithm in 840 EVO's firmware monitors the temperature of the SSD, preventing it at optimal operating temperature. When the SSD is exposed to hot weather or extreme temperatures, the algorithm controls the SSD's power supply to keep it cool. The throttling feature can drop the SSD's temperature when necessary to protect your data and ensure the responsiveness you expect.

Rock-solid encryption to secure your data

You don't only need to protect your PC's hardware but your data needs protection as well. When you take your laptop on the road, you expose your personal information to new vulnerabilities. But don't worry, 840 EVO's Self-Encrypting Drive (SED) security technology will help keep your data safe at all times. The drive includes an AES 256-bit hardware-based encryption engine to ensure that your personal files remain secure, even if you lose your laptop. Being hardware-based, the encryption engine secures your data without performance degradation that you may experience with a software-based encryption.

Choose the capacity that's right for you

With a wide range of capacities from a basic 120GB, a rare offering of 750GB, to the spacious 1TB, 840 EVO helps you easily find the perfect SSD for your PC upgrade. Because it is offered in the same capacities as conventional HDDs, 840 EVO eliminates the need to scale up or scale down the size of your drive. 840 EVO also comes in ample sizes of 750GB and a genuine 1TB to satisfy your extensive storage needs. Choose the right-sized SSD for your PC, all with the superb quality that a Samsung-made SSD can offer.



Samsung SSD 840 EVO Media Review

"840 was good, 840 EVO is better" "the end result is... different"
- Tom`s Hardware -

"To say that I really like the EVO is an understatement" "……it'll be a real winner and probably my pick for best mainstream SSD"
- AnandTech -

"definitely the most complete package released to the date yet"
- The SSD Review -

"The 840 EVO has set a new benchmark for mainstream consumer SSDs"
- HEXUS -

"A huge amount of seriously quick solid state storage for a relatively affordable price"
- PC GAMER -